

This listing of claims will replace all prior versions, and listings, of claims in the application:

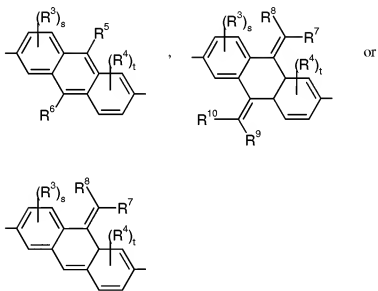
Listing of Claims:

1. (Cancelled)
2. (Previously Presented) A compound comprising identical or different groups of formula II



wherein

G is, in case of multiple occurrence independently of one another,



R^3 to R^6 are, independently of each other, F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one

another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R⁷ to R¹⁰ are, independently of each other, F, Cl, Br, I, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R⁰ and R⁰⁰ are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, -CX¹=CX²-, -C≡C-, or furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, 1,4-cyclohexylene, in which 1,4-cyclohexylene one or two non-adjacent CH₂ groups are optionally replaced by O and/or S, oxazole, thiazole, thiadiazole, imidazole, pyrazine, phenanthrene, or alkyl fluorene, which are optionally mono- or polysubstituted by R³,

X¹ and X² are independently of each other H, F, Cl or CN,

Y¹ and Y² are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1, and

z is an integer of 2 to 5000,

wherein the groups [(G)_g-(A)_a] can be identical or different, and

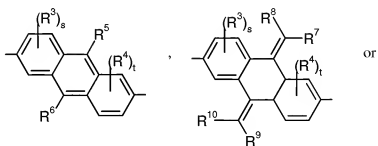
wherein in at least one recurring unit [(G)_g-(A)_a] g = a = 1.

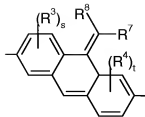
3. (Previously Presented) A compound of formula IIA



wherein

G is, in case of multiple occurrence independently of one another,





R^3 to R^4 are, independently of each other, F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^5 to R^6 are, independently of each other, F, I, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^7 to R^{10} are, independently of each other, F, Cl, Br, I, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

- P is a polymerizable or reactive group,
- Sp is a spacer group or a single bond,
- s and t are independently of each other 0, 1, 2 or 3,
- g is, in case of multiple occurrence independently of one another, 1, 2 or 3,
- A is, in case of multiple occurrence independently of one another, $-CX^1= CX^2-$, $-C\equiv C-$, or furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, 1,4-cyclohexylene, in which 1,4-cyclohexylene one or two non-adjacent CH_2 groups are optionally replaced by O and/or S, oxazole, thiazole, thiadiazole, imidazole, pyrazine, phenanthrene, or alkyl fluorene, which are optionally mono- or polysubstituted by R^3 ,
- X^1 and X^2 are independently of each other H, F, Cl or CN,
- Y^1 and Y^2 are independently of each other H, F, Cl or CN,
- a is, in case of multiple occurrence independently of one another, 0 or 1,
- z is an integer ≥ 1 ,
- R^1 and R^2 are, independently of each other, F, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-O-$, $-S-$, $-NH-$, $-NR^0$, $-SiR^0R^{00}$, $-CO-$, $-COO-$, $-OCO-$, $-OCO-O-$, $-S-CO-$, $-$

CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, P-Sp, B(OR^{xn})(OR^{xn}), SnR^xR^{xx}R^{xxx} or SiR^xR^{xx}R^{xxx},

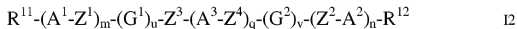
R^x, R^{xx} and

R^{xxx} are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms, and

R^{xn} and R^{xn} are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR^{xn} and OR^{xn} together with the boron atom form a cyclic group having 2 to 10 C atoms,

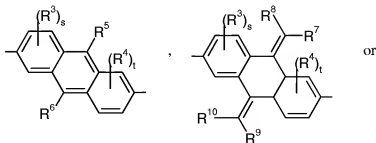
wherein in at least one recurring unit [(G)_g-(A)_a] g = a = 1.

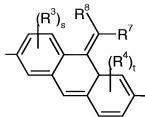
4. (Previously Presented) A compound of formula I2



wherein

G¹ and G² are, independently of each other and in case of multiple occurrence of either G¹ and/or G² each of such G¹ and G² independently of one another,





R^3 to R^4 and

R^{10} are, independently of each other, F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^{11} and R^{12} are, independently of each other, F, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^5 to R^6 are, independently of each other, F, I, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^7 to R^{10} are, independently of each other, F, Cl, Br, I, NO_2 , NCS, SiF_3 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

A^1 to A^3 are, independently of each other and in case of multiple occurrence of any of A^1 to A^3 each of such A^1 to A^3 independently of one another, -CX¹=CX²-, -C≡C-, or furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl, indane-2,5-diyl, 1,4-cyclohexylene, in which 1,4-cyclohexylene one or two non-adjacent CH_2 groups are optionally replaced by O and/or S, oxazole, thiazole, thiadiazole, imidazole, pyrazine, phenanthrene, or alkyl fluorene, which are optionally mono- or polysubstituted by R³,

X^1 and X^2 are independently of each other H, F, Cl or CN,

Z^1 to Z^4 are, independently of each other, -O-, -S-, -CO-, -COO-, -OCO-, -S-CO-, -CO-S-, -O-COO-, -CO-NR⁰-, -NR⁰-CO-, -OCH₂-, -CH₂O-, -SCH₂-, -CH₂S-, -CF₂O-, -OCF₂-, -CF₂S-, -SCF₂-, -CH₂CH₂-, -CF₂CH₂-, -CH₂CF₂-, -CF₂CF₂-, -CH=N-, -N=CH-, -N=N-, -CH=CR⁰-, -CY¹=CY²-, -C≡C-, -CH=CH-COO-, -OCO-

CH=CH- or a single bond,

Y^1 and Y^2 are independently of each other H, F, Cl or CN,

m, n and q are independently of each other 0, 1, 2 or 3, wherein at least one of m, n and q is 1, 2 or 3, and

u and v are independently of each other 0, 1 or 2, with $u+v > 0$.

5. (Previously Presented) A compound according to claim 3, wherein z is an integer of 2 to 5000.

6. (Previously Presented) A compound according to claim 3, wherein z is an integer of 1 to 15.

7. (Previously Presented) A compound according to claim 3, wherein one or both of R^1 and R^2 denote P-Sp-.

8. (Previously Presented) A compound according to claim 2, wherein R^3 and R^4 are, each independently, F, Cl, CN, alkyl, oxaalkyl, alkoxy, alkylcarbonyl or alkoxy carbonyl with 1 to 15 C-atoms or alkenyl, alkenyloxy or alkynyl with 2 to 15 C-atoms.

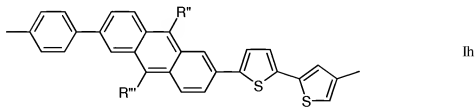
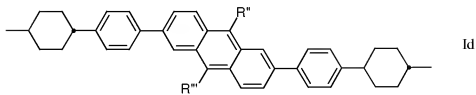
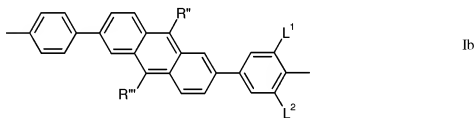
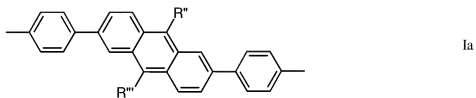
9. (Previously Presented) A compound according to claim 2, wherein R^{5-6} are, each independently, F, Cl, CN, C_1 - C_{20} -alkyl that is optionally substituted with one or more fluorine atoms, C_2 - C_{20} -alkenyl, C_2 - C_{20} -alkynyl, alkoxy, C_1 - C_{20} -thioalkyl, C_1 - C_{20} -silyl, C_1 - C_{20} -ester, C_1 - C_{20} -amino, C_1 - C_{20} -fluoroalkyl, or $(CH_2CH_2O)_m$ with m being an integer of 1 to 6, and

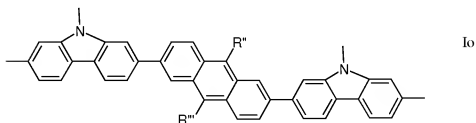
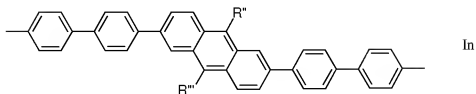
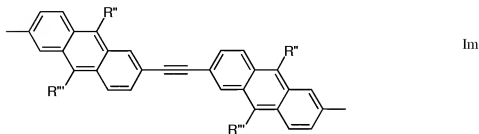
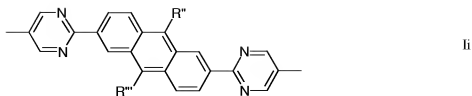
R^{7-10} are, each independently, F, Cl, C_1 - C_{20} -alkyl that is optionally substituted with one or more fluorine atoms, C_2 - C_{20} -alkenyl, C_2 - C_{20} -alkynyl, C_1 - C_{20} -alkoxy, C_1 - C_{20} -thioalkyl, C_1 - C_{20} -silyl, C_1 - C_{20} -ester, C_1 - C_{20} -amino, C_1 - C_{20} -fluoroalkyl, or $(CH_2CH_2O)_m$ with m being an integer of 1 to 6.

10. (Cancelled)

11. (Previously Presented) A compound according to claim 2, wherein P is a vinyl ether, propenyl ether or oxetane group.

12. (Previously Presented) A compound, which includes a group of formula Ia, Ib, Id, Ih, Ii, Im, In or Io





wherein

R'' and R''' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms, and

Y^1 and Y^2 are independently of each other H, F, Cl or CN,

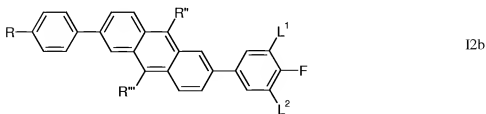
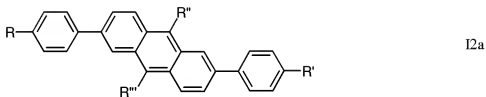
L^1 and L^2 are independently of each other H or F,

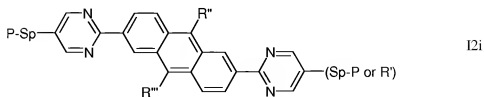
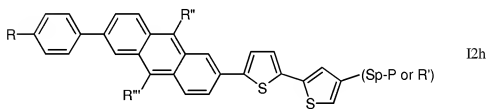
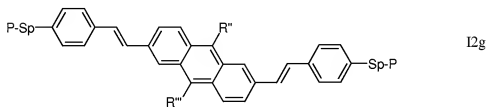
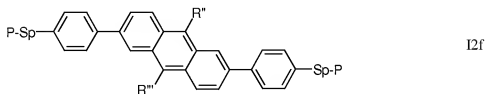
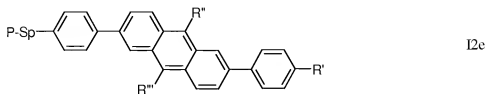
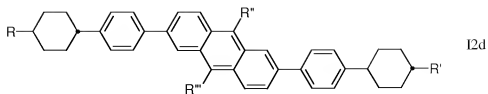
P is a polymerizable or reactive group, and

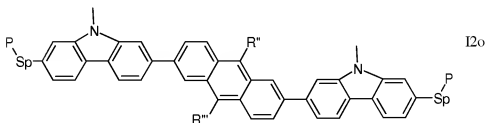
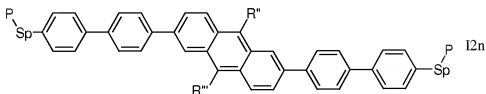
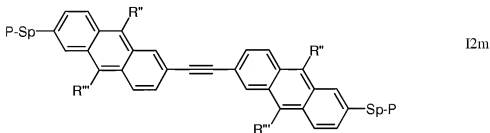
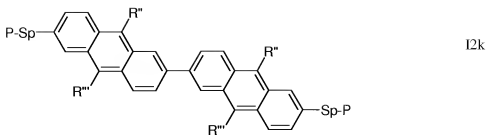
Sp is a spacer group or a single bond,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.



13. (Currently Amended) A compound, which is of one of the following formulae







wherein

P is a polymerizable or reactive group, $\text{CH}_2=\text{CW}^1-\text{COO}-$, $\text{W}^2\text{HC}=\text{CH}-$, W^2 , W^2  $(\text{CH}_2)_{k1}-\text{O}-$, $\text{CH}_2=\text{CW}^2-(\text{O})_{k1}-$, $\text{CH}_3-\text{CH}=\text{CH}-\text{O}-$, $(\text{CH}_2=\text{CH})_2\text{CH}-\text{OCO}-$, $(\text{CH}_2=\text{CH}-\text{CH}_2)_2\text{CH}-\text{OCO}-$, $(\text{CH}_2=\text{CH})_2\text{CH}-\text{O}-$, $(\text{CH}_2=\text{CH}-\text{CH}_2)_2\text{N}-$, $\text{HS}-\text{CW}^2\text{W}^3-$, $\text{CH}_2=\text{CW}^1-\text{CO}-\text{NH}-$, $\text{CH}_2=\text{CH}-(\text{COO})_{k1}-\text{Phe}-(\text{O})_{k2}-$, $\text{OCN}-$, or $\text{W}^4\text{W}^5\text{W}^6\text{Si}-$, with W^1 being H, Cl, CN, phenyl or alkyl with 1 to 5 C-atoms,

W² and W³ being independently of each other H or alkyl with 1 to 5 C-atoms,
W⁴, W⁵ and W⁶ being independently of each other Cl, oxaalkyl or
oxacarbonylalkyl with 1 to 5 C-atoms, Phe being 1,4-phenylene and k₁ and k₂
being independently of each other 0 or 1

Sp is a spacer group or a single bond,

R and R' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, B(OR^x)(OR^{xm}), SnR^xR^{xxx}R^{xxx} or SiR^xR^{xxx}R^{xxx},

R^x, R^{xx} and

R^{xxx} are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms,

R^{xi} and R^{xm} are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR^{xi} and OR^{xm} together with the boron atom form a cyclic group having 2 to 10 C atoms

R'' and R''' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

L¹ and L² are independently of each other H or F,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms, and

Y^1 and Y^2 are independently of each other H, F, Cl or CN,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.

14-15. (Cancelled)

16. (Currently Amended) A polymer which has been obtained by polymerizing a compound of formula II according to Claim 2 or a polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.

17. (Currently Amended) An anisotropic polymer which has been obtained by polymerizing a compound of formula II according to Claim 2 or a polymerizable LC material comprising a compound of formula II according to Claim 2 in its oriented state in form of a film.

18. (Currently Amended) A semiconductor or charge transport material comprising at least one compound of formula II according to Claim 2, polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or polymer which has been obtained by polymerizing a compound of formula II according to Claim 2 or a polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at

least one of said compounds is polymerizable.

19. (Currently Amended) A light-emissive material comprising at least one compound of formula II according to Claim 2,

polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula II according to Claim 2 or a polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.

20. (Currently Amended) An electrooptical display, LCD, cLCD, optical film, polarizer, compensator, beam splitter, reflective film, alignment layer, color filter, holographic element, hot stamping foil, colored image, decorative or security marking, consumer object, document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical properties, cosmetic product, pharmaceutical product, diagnostic product, nonlinear optical element, optical information storage device, a chiral dopant, an electronic device, OFET, a component of an integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency Identification (RFID) tag, a semiconducting or light-emitting component of organic light emitting diode (OLED), electroluminescent display or backlight of an LCD, photovoltaic or sensor device, an electrode material in a battery, a photoconductor, or electrophotographic recording or alignment layer in an LCD or OLED device, comprising at least one

compound of formula II according to Claim 2,

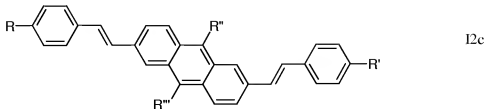
polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula II according to Claim 2 or a polymerizable LC material comprising at least one compound of formula II according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer.

21-24. (Cancelled)

25. (Previously Presented) A compound, which is of formulae I2c



wherein

R and R' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, B(OR^x)(OR^{xm}), SnR^xR^{xs}R^{xxx} or SiR^xR^{xs}R^{xxx},

R^s, R^{xs} and

R^{xxx} are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms,

R^{xi} and R^{xm} are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR^{xi} and OR^{xm} together with the boron atom form a cyclic group having 2 to 10 C atoms

R'' and R''' are, independently of each other, F, Cl, Br, I, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂

groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R⁰ and R⁰⁰ are independently of each other H or alkyl with 1 to 12 C-atoms, and

Y¹ and Y² are independently of each other H, F, Cl or CN,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO₂, NCS, SF₃ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.

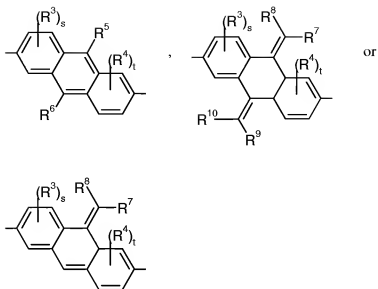
26-32. (Cancelled)

33. (Previously Presented) An LC medium or a polymerizable LC material comprising at least one compound comprising identical or different groups of formula II



wherein

G is, in case of multiple occurrence independently of one another,



R^3 to R^6 are, independently of each other, F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, $-\text{NR}^0-$, $-\text{SiR}^0\text{R}^{00}-$, $-\text{CO}-$, $-\text{COO}-$, $-\text{OCO}-$, $-\text{OCO-O}-$, $-\text{S-CO}-$, $-\text{CO-S}-$, $-\text{CY}^1=\text{CY}^2-$ or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^7 to R^{10} are, independently of each other, F, Cl, Br, I, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, $-\text{NR}^0-$, $-\text{SiR}^0\text{R}^{00}-$, $-\text{CO}-$, $-\text{COO}-$, $-\text{OCO}-$, $-\text{OCO-O}-$, $-\text{S-CO}-$, $-\text{CO-S}-$, $-\text{CY}^1=\text{CY}^2-$ or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

- Sp is a spacer group or a single bond,
- s and t are independently of each other 0, 1, 2 or 3,
- g is, in case of multiple occurrence independently of one another, 1, 2 or 3,
- A is, in case of multiple occurrence independently of one another, $-CX^1=CX^2-$, $-C\equiv C-$, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R^3 ,
- X^1 and X^2 are independently of each other H, F, Cl or CN,
- Y^1 and Y^2 are independently of each other H, F, Cl or CN,
- a is, in case of multiple occurrence independently of one another, 0 or 1, and
- z is ≥ 1 ,

wherein the groups $[(G)_g-(A)_a]$ can be identical or different,

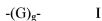
and wherein the polymerizable LC material optionally comprises at least one further compound, wherein at least one of said compounds is polymerizable.

34. (Previously Presented) A polymer which has been obtained from a polymerizable LC material according to claim 33.

35. (Previously Presented) An anisotropic polymer which has been obtained from a polymerizable LC material according to claim 33 in its oriented state in form of a film.

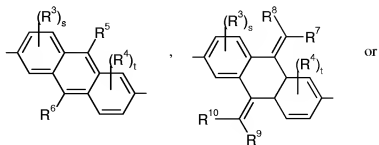
36. (Previously Presented) A semiconductor or charge transport material, light-emissive material, electrooptical display, LCD, eLCD, optical film, polarizer, compensator, beam splitter, reflective film, alignment layer, color filter, holographic element, hot stamping foil, coloured image, decorative or security marking, consumer object, document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical properties, cosmetic product, pharmaceutical product, diagnostic product, nonlinear optical element, optical information storage device, electronic device, OFET, a component of integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency Identification (RFID) tag, a semiconducting or light-emitting component of organic light emitting diode (OLED), electroluminescent display, backlight of an LCD, photovoltaic or sensor device, an electrode material in a battery, a photoconductor, electrophotographic device, electrophotographic recording device, comprising
an LC medium or polymerizable material according to claim 33, or
a polymer which has been obtained from a polymerizable LC material according to claim 33, or
an anisotropic polymer which has been obtained from a polymerizable LC material according to claim 33 in its oriented state in form of a film.

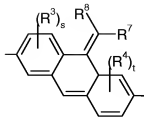
37. (Previously Presented) A compound comprising one or more identical or different groups of formula I



wherein

G is, in case of multiple occurrence independently of one another,





R^3 to R^{10} are independently of each other F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or straight chain or branched alkyl having 1 to 30 C-atoms, which is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, $-\text{NR}^0$, $-\text{SiR}^0\text{R}^{00}$, $-\text{CO}-$, $-\text{COO}-$, $-\text{OCO}-$, $-\text{OCO-O}-$, $-\text{S-CO}-$, $-\text{CO-S}-$, $-\text{CY}^1=\text{CY}^2$ or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,


P is a polymerisable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

which contains at least one group P-Sp, and wherein P is $\text{CH}_2=\text{CW}^1\text{-COO-}$, $\text{W}^2\text{HC} \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{---} \end{array} \text{CH-}$,

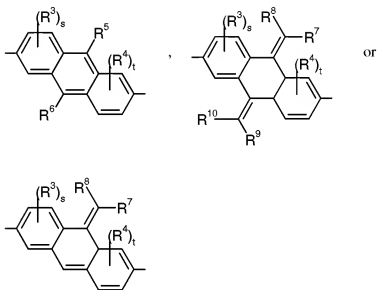
 $(\text{CH}_2)_{k1}\text{-O-}$, $\text{CH}_2=\text{CW}^2\text{-(O)}_{k1}$, $\text{CH}_3\text{-CH}=\text{CH-O-}$, $(\text{CH}_2=\text{CH})_2\text{CH-OCO-}$, $(\text{CH}_2=\text{CH-CH}_2)_2\text{CH-OCO-}$, $(\text{CH}_2=\text{CH})_2\text{CH-O-}$, $(\text{CH}_2=\text{CH-CH}_2)_2\text{N-}$, $\text{HS-CW}^2\text{W}^3$, $\text{CH}_2=\text{CW}^1\text{-CO-NH-}$, $\text{CH}_2=\text{CH-(COO)}_{k1}\text{-Phe-(O)}_{k2}$, OCN- , or $\text{W}^4\text{W}^5\text{W}^6\text{Si-}$, with W^1 being H, Cl, CN, phenyl or alkyl with 1 to 5 C-atoms, W^2 and W^3 being independently of each other H or alkyl with 1 to 5 C-atoms, W^4 , W^5 and W^6 being independently of each other Cl, oxalkyl or oxacarbonylalkyl with 1 to 5 C-atoms, Phe being 1,4-phenylene and k_1 and k_2 being independently of each other 0 or 1.

38. (Previously Presented) A compound of claim 37, comprising one or more identical or different groups of formula II



wherein

G is, in case of multiple occurrence independently of one another,



R^3 to R^{10} are independently of each other F, Cl, Br, I, CN, NO_2 , NCS, SF_3 or straight chain or branched alkyl having 1 to 30 C-atoms, which is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, $-\text{NR}^0$, $-\text{SiR}^0\text{R}^{00}$, $-\text{CO}-$, $-\text{COO}-$, $-\text{OCO}-$, $-\text{OCO-O}-$, $-\text{S-CO}-$, $-\text{CO-S}-$, $-\text{CY}^1=\text{CY}^2$ or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerisable or reactive group,

Sp is a spacer group or a single bond,

- s and t are independently of each other 0, 1, 2 or 3,
- g is, in case of multiple occurrence independently of one another, 1, 2 or 3,
- A is, in case of multiple occurrence independently of one another, $-CX^1=CX^2-$, $-C\equiv C-$, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from N, O and S, and are optionally mono- or polysubstituted by R^3 ,
- X^1 and X^2 are independently of each other H, F, Cl or CN,
- a is, in case of multiple occurrence independently of one another, 0 or 1,
- z is an integer ≥ 1 ,

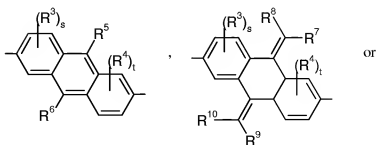
wherein in case of multiple occurrence the groups $[(G)_g-(A)_a]$ can be identical or different.

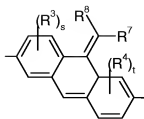
39. (Previously Presented) A compound of claim 37, which is of formula II A



wherein

- G is, in case of multiple occurrence independently of one another,





R^3 to R^{10} are independently of each other F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or straight chain or branched alkyl having 1 to 30 C-atoms, which is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, $-\text{CO}-$, $-\text{COO}-$, $-\text{OCO}-$, $-\text{OCO-O}-$, $-\text{S-CO}-$, $-\text{CO-S}-$, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerisable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, $-\text{CX}^1=\text{CX}^2$ -, $-\text{C}\equiv\text{C}-$, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from N, O and S, and are optionally mono- or polysubstituted by R^3 ,

X^1 and X^2 are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1,

z is an integer ≥ 1 ,



wherein in case of multiple occurrence the groups [(G)_g-(A)_a] can be identical or different,

R¹ and R² have independently of each other one of the meanings of R³, or denote B(OR')(OR''), SnR⁰R⁰⁰R⁰⁰⁰ or SiR⁰R⁰⁰R⁰⁰⁰,

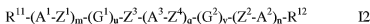
R⁰⁻⁰⁰⁰ are independently of each other H, aryl or alkyl with 1 to 12 C-atoms,

R' and R'' are independently of each other H or alkyl with 1 to 12 C-atoms, or OR' and OR'' together with the boron atom may also form a cyclic group having 2 to 10 C atoms,

and wherein one or both of R¹ and R² denote P-Sp or denote B(OR')(OR''), SnR⁰R⁰⁰R⁰⁰⁰ or

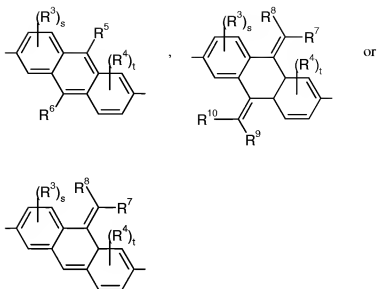
SiR⁰R⁰⁰R⁰⁰⁰, wherein P is CH₂=CW¹-COO-, , , CH₂=CW²-(O)_{k1}-, CH₃-CH=CH-O-, (CH₂=CH)₂CH-OCO-, (CH₂=CH-CH₂)₂CH-OCO-, (CH₂=CH)₂CH-O-, (CH₂=CH-CH₂)₂N-, HS-CW²W³-, CH₂=CW¹-CO-NH-, CH₂=CH-(COO)_{k1}-Phe-(O)_{k2}-, OCN-, or W⁴W⁵W⁶Si-, with W¹ being H, Cl, CN, phenyl or alkyl with 1 to 5 C-atoms, W² and W³ being independently of each other H or alkyl with 1 to 5 C-atoms, W⁴, W⁵ and W⁶ being independently of each other Cl, oxaalkyl or oxacarbonylalkyl with 1 to 5 C-atoms, Phe being 1,4-phenylene and k₁ and k₂ being independently of each other 0 or 1.

40. (Previously Presented) A compound of claim 37, which is of formula I2



wherein

G¹ and G² have independently of each other and in case of multiple occurrence independently of one another,



R^3 to R^{10} are independently of each other F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or straight chain or branched alkyl having 1 to 30 C-atoms, which is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, $-\text{NR}^0$ -, $-\text{SiR}^0\text{R}^{00}$ -, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, $-\text{CY}^1=\text{CY}^2$ - or $-\text{C}\equiv\text{C}-$ in such a manner that O and/or S atoms are not linked directly to one another, or P-Sp,

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerisable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

R^{11} and R^{12} have independently of each other one of the meanings of R^3 ,

A^1 to A^3 are, independently of each other and in case of multiple occurrence of any of A^1 to A^3 each of such A^1 to A^3 independently of one another, $-\text{CX}^1=\text{CX}^2$ -, $-\text{C}\equiv\text{C}-$, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more

hetero atoms selected from N, O and S, and are optionally mono- or polysubstituted by R³,

Z¹ to Z⁴ are independently of each other -O-, -S-, -CO-, -COO-, -OCO-, -S-CO-, -CO-S-, -O-COO-, -CO-NR⁰-, -NR⁰-CO-, -OCH₂-, -CH₂O-, -SCH₂-, -CH₂S-, -CF₂O-, -OCF₂-, -CF₂S-, -SCF₂-, -CH₂CH₂-, -CF₂CH₂-, -CH₂CF₂-, -CF₂CF₂-, -CH=N-, -N=CH-, -N=N-, -CH=CR⁰-, -CY¹=CY²-, -C≡C-, -CH=CH-COO-, -OCO-CH=CH- or a single bond,

Y¹ and Y² are independently of each other H, F, Cl or CN,

m, n and q are independently of each other 0, 1, 2 or 3,

u and v are independently of each other 0, 1 or 2, with u+v > 0,

and wherein one or both of R¹¹ and R¹² denote P-Sp, wherein P is CH₂=CW¹-COO-,

$\text{W}^2\text{HC} \begin{array}{c} \diagup \text{O} \diagdown \\ \diagdown \text{CH} \diagup \end{array}$, $\text{W}^2 \begin{array}{c} \diagup \text{O} \diagdown \\ \diagdown \text{CH} \diagup \end{array} (\text{CH}_2)_{k_1} \text{O}-$, CH₂=CW²-(O)_{k1}-, CH₃-CH=CH-O-, (CH₂=CH)₂CH-OCO-, (CH₂=CH-CH₂)₂CH-OCO-, (CH₂=CH)₂CH-O-, (CH₂=CH-CH₂)₂N-, HS-CW²W³-, CH₂=CW¹-CO-NH-, CH₂=CH-(COO)_{k1}-Phe-(O)_{k2}-, OCN-, or W⁴W⁵W⁶Si-, with W¹ being H, Cl, CN, phenyl or alkyl with 1 to 5 C-atoms, W² and W³ being independently of each other H or alkyl with 1 to 5 C-atoms, W⁴, W⁵ and W⁶ being independently of each other Cl, oxalkyl or oxacarbonylalkyl with 1 to 5 C-atoms, Phe being 1,4-phenylene and k₁ and k₂ being independently of each other 0 or 1..

41. (Currently Amended) A compound of claim 38 37, wherein z is 1.

42. (Currently Amended) A compound of claim 38 37, wherein z is from 2 to 5000.

43. (Previously Presented) A compound of claim 37, wherein P is a vinylether,

propenyloether or oxetane group or a group of formula CH₂=CW¹-COO- or $\text{W}^2\text{HC} \begin{array}{c} \diagup \text{O} \diagdown \\ \diagdown \text{CH} \diagup \end{array}$ - ,

wherein W¹ is H, Cl, CN, phenyl or alkyl with 1 to 5 C-atoms, and W² is H or alkyl with 1 to 5 C-atoms.

44. (Previously Presented) A compound of claim 38, wherein A is, each independently, furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, or 1,4-cyclohexylene, in which 1,4-cyclohexylene one or two non-adjacent CH₂ groups are optionally replaced by O and/or S, wherein these groups are unsubstituted, mono- or polysubstituted by R³.

45. (Previously Presented) A polymerizable LC material comprising one or more compounds according to claim 37.

46. (Previously Presented) A polymer which has been obtained from a compound according to claim 37 or from a polymerizable LC material comprising a compound according to claim 37.

47. (Previously Presented) An anisotropic polymer which has been obtained from a compound according to claim 37 or from a polymerizable LC material comprising a compound according to claim 37 in its oriented state in form of a film.

48. (Previously Presented) A semiconductor or charge transport material, light-emissive material, electrooptical display, LCD, eLCD, optical film, polarizer, compensator, beam splitter, reflective film, alignment layer, color filter, holographic element, hot stamping foil, coloured image, decorative or security marking, consumer object, document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical properties, cosmetic product, pharmaceutical product, diagnostic product, nonlinear optical element, optical information storage device, electronic device, OFET, a component of integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency Identification (RFID) tag, a semiconducting or light-emitting component of organic light emitting diode (OLED), electroluminescent display, backlight of an LCD, photovoltaic or

sensor device, an electrode material in a battery, a photoconductor, electrophotographic device, electrophotographic recording device, comprising
a compound according to claim 37, or
a polymerizable LC material comprising one or more compounds according to claim 37, or
a polymer which has been obtained from a compound according to claim 37 or from a
polymerizable LC material comprising a compound according to claim 37, or
an anisotropic polymer which has been obtained from a compound according to claim 37 or
from a polymerizable LC material comprising a compound according to claim 37 in its
oriented state in form of a film.

49. (Previously Presented) A polymer which has been obtained from a
compound according to claim 3 or from a polymerizable LC material comprising a compound
according to claim 3.

50. (Previously Presented) An anisotropic polymer which has been obtained
from a compound according to claim 3 or from a polymerizable LC material comprising a
compound according to claim 3 in its oriented state in form of a film.

51. (Previously Presented) A semiconductor or charge transport material,
light-emissive material, electrooptical display, LCD, eLCD, optical film, polarizer,
compensator, beam splitter, reflective film, alignment layer, color filter, holographic element,
hot stamping foil, coloured image, decorative or security marking, consumer object,
document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical
properties, cosmetic product, pharmaceutical product, diagnostic product, nonlinear optical
element, optical information storage device, electronic device, OFET, a component of
integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency
Identification (RFID) tag, a semiconducting or light-emitting component of organic light
emitting diode (OLED), electroluminescent display, backlight of an LCD, photovoltaic or
sensor device, an electrode material in a battery, a photoconductor, electrophotographic
device, electrophotographic recording device, comprising
a compound according to claim 3, or
a polymerizable LC material comprising one or more compounds according to claim 3, or

a polymer which has been obtained from a compound according to claim 3 or from a polymerizable LC material comprising a compound according to claim 3, or an anisotropic polymer which has been obtained from a compound according to claim 3 or from a polymerizable LC material comprising a compound according to claim 3 in its oriented state in form of a film.